MAR 3 1 2006 PATRADEM

Approved for use through 07/31/2006. OMB 0851-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE sons are required to respond to a collection of information unless it contains a valid QMB control number.

Under the Paperwork Reduction Act of 1995,

Substitute for form 1449/PTO

Sheet 1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of 1

Complete if Known				
Application Number	10/520,824			
Filing Date	January 7, 2005			
First Named Inventor	Hirohisa TANAKA			
Art Unit	1754			
Examiner Name	Cam N. NGUYEN			
Attorney Docket Number	71465.0008			

			U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	Number-Kind Code ^{2 (# Intown)}				
		US-			
		ÜS-			
		US-		·	
	<u> </u>	US-			
		US-			
	1	US-			

	_	FORE	IGN PATENT DOCU	MENTS		
	Cite No.1	Cite Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	٠,
2	_	Country Code ³ "Number ⁴ "Kind Code ³ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	L
CAU		JP H11-057471	03-02-1999	Toyota Motor Corp.		✓
CIN	,	JP \$51-91890	08-12-1976	<unknown></unknown>		_
Can		JP H11-207183	08-03-1999	Daihatsu Motor Co., Ltd.		✓
CAN		JP 2000-042368	02/15/2000	Nissan Motor Co., Ltd.		1

Signature	Can Nguyen	Considered			
*EXAMINER: considered. I	Initial if reference considered, whether or not citation is in conformance with MPEP 609. Include copy of this form with next communication to applicant. Applicant's unique citation	n designation nun	nper (opuon	gi). See Ninus (Codes of

USPTO Patent Documents at www.uspto.gdv.or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Petent and Trademark Office; U.S. DEPARTMENT OF COMMERCE the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet 1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known 10/520,824 **Application Number** January 7, 2005 Filing Date Hirohisa TANAKA First Named Inventor Art Unit 1754 Cam N. NGUYEN **Examiner Name** Attorney Docket Number 71465.0008

				DOCUMENTS	Pages, Columns, Lines, Where
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (F known)	20.00.4005	Absolution	
M.K		^{US-} 5,439,865	08-08-1995	Abe et al.	
1		^{US-} 6,602,479	08-05-2003	Taniguchi et al.	
		US- 5,990,038	11-23-1999	Suga et al.	
		US- 5,462,907	10-31-1995	Farrauto et al.	
		^{US-} 5,814,576	09-29-1998	Yamamoto	
		US- 5,491,120	02-13-1996	Voss et al.	
-+-	 -	US- 5,212,142	05-18-1993	Dettling	
-+-	<u> </u>	US- 5,139,992	08-18-1992	Tauster et al.	
+-	I	US- 5,254,519	10-19-1993	Wan et al	
-1-		US- 5,837,642	11-17-1998	Tanaka et al.	
	†	US- 5,849,659	12-15-1998	Tanaka et al.	·
1		US- 6,464,946	10-15-2002	Yamada et al,	
	T	US- 6,682,706	01-27-2004	Yamamoto et al.	
		US- 6,808,687	10-26-2004	Uenishi et al.	
1	1	US- 6,881,384	04-19-2005	Uenishi et al.	
1	+	US- 6,261,989	07-17-2001	Tanaka et al.	
1	1	US- 6,864,214	03-08-2005	Uenishi et al.	
1/	1.	^{US-} 6,576,200	06-10-2003	Yamamoto et al.	
Va 1	1/	US- 6,620,762	09-16-2003	Tan et al.	

		FORF	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	
***************************************	,	Country Code ³ "Number ⁴ "Kind Code ³ (if known)	MM-DD-YYYY		Of Relevant Figures Appear	Li
cal		JP 2001-224963	08-21-2001	Nissan Motor		V
MAA		JP H07-308578	11-28-1995	Daihatsu Motor Co., Ltd.		Y
ONLY	7-	EP 0 525 677 A1	07-24-1992	Daihatsu Motor Co., Ltd.		↓
NAM		JP H08-224446	09-03-1996	Daihatsu Motor Co., Ltd.		1
Cir		JP 2000-256017	09-19-2000	Nissan Motor Co., Ltd.		1
CAN		JP 60-025544	02-08-1985	Toyota Motor Corp.		┰

Examiner Signature	Cam Naugen	Date Considered S476

*EXAMINER: Initial if reference considered, whether of riot citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with fext communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of considered. Include copy of this form with fext communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 'Applicant is to place a check mark here if English language

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, useful or process, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (07-05)
Approved for use through 07/31/2006, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet 2

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known			
Application Number	10/520,824		
Filing Date	January 7, 2005		
First Named Inventor	Hirohisa TANAKA		
Art Unit	1754		
Examiner Name	Cam N. NGUYEN		
Attorney Docket Number	71465 0008		

			U. S. PATEN	T DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (F Innom)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
Onu	/	US- 5,380,692	01-10-1995	Nakatsuji et al.	
	1-	US-			
		US-			
·	1	US-		·	
		US-			
-		US-			
		US			
		US-			
		US-		l	1

		FORE	IGN PATENT DOCU	MENTS Name of Patentee or		
Examiner Cite	Foreign Patent Document	n Patent Document Publication Date		Pages, Columns, Lines, Where Relevant Passages	٠,	
-	Country Code ³ Number ⁴ Kind Code ⁵ (if known)		MM-DD-YYYY		Or Relevant Figures Appear	Γ
Chi	γ.	JP 62-241552	10-22-1987	Catler Kogyo KK		1
CAR	-	JP H07-299360	11-14-1995	Cataler Ind. Co.		1
CAR		JP H05-245372	09-24-1993	Sekiyu Sangyo Kasseika		✓
(MA		JP H05-031367	02-09-1993	Daihatsu Motor Co., Ltd.		↓ ✓
car	1	JP H06-210175	08-02-1994	Daihatsu Motor Co., Ltd.		✓
OAA	y	JP H07-068175	03-14-1995	Daihatsu Motor Co., Ltd.		1

Examiner		Date	dalak
Signature	(am Naugen	Considered	15141 00

EXAMINER: Initial if reference considered whether of not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with new communication to applicant. 'Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.acv or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language

Translation is attached.
This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known				
Application Number	10/520,824			
Filing Date	January 7, 2005			
First Named Inventor	Hirohisa TANAKA			
Art Unit	1754			
Examiner Name	Cam N. NGUYEN			
Attorney Docket Number	71465 0008			

			CUMENTS Lines Where			
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (f known)}	Publication Date - MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		US-				
		US-				
	 	US-	 			
	+	US-				
	+	US-				
		US-				
	1	US-				
	·	US-				
	†	US-				
	1	US-				
		US-				
		US-				
		US-				
		U\$-	·			
	\top	UŞ-				
	1	US-				
		U\$-				
	1	US-				
	\neg	US-	1			

		FORE	IGN PATENT DOCU	MENTS	Pages, Columns, Lines,	_
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Where Relevant Passages Or Relevant Figures Appear	l To
		Country Code ³ "Number ⁴ "Kind Code ⁵ (if known)	MM-DD-YYYY			₩
(1)		JP H07-080311	03-28-1995	Daihatsu Motor Co., Ltd.		\checkmark
NA IU	-	JP H05-220395	08-31-1993	Daihatsu Motor Co., Ltd.		Y
Chi	 	JP H05-253484	10-05-1993	Daihatsu Motor Co., Ltd.		V
N/W	}	JP 61-191518	08-26-1986	Nippon Soda Co., Ltd.		↓ ✓
<u> </u>	/_	JP 2000-143251				✓
1010		JP 2000-042386				V

		Date	2 1,11010
Examiner	1 3 4 10 10 10 1	Considered	714100
Signature	LEAN NOW MAN	001,000,00	0/ //0 e
Oigitation	Cam Nosugar	7.00	ift id conformance and not

*EXAMINER: Initial if reference considered, whether of not originon is in conformance with MPEP 609. Draw line through citation if not is conformance and not considered. Include copy of this form with next complunication to applicant. ¹Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspfo.gov (d. MPEP 901:04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must procede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. °Applicant is to place a check mark here if English language

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, use including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (07-05)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
o a collection of information unless it contains a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no persons are required	Complete if Known			
Substitute for form 1449/PTO .	Application Number	10/520,824		
	Filing Date	January 7, 2005		
INFORMATION DISCLOSURE	First Named Inventor	Hirohisa TANAKA		
STATEMENT BY APPLICANT	Art Unit	1754		
(Use as many sheets as necessary)	Examiner Name	Cam N. NGUYEN		
n -	Attorney Docket Number	71465.0008		

			U. S. PATENT DO	Alama of Detector or	Donne Columne Lines Where
Examiner Ci Initials* No	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ^{2 (# known)}			r iguico reposi.
		US-	1 . L		
		US-			
		us-			
	 	US-			
	 	US-			
		US-	1		
	+	US-			
	+	US-			
	+	US-	 		
	 	US-			
	+-	US-			
	+-	US-			
	+	US-	 		
	+	US	 		
	+	US-			
	+-	US-	- 		

		FORE	IGN PATENT DOCU	IMENTS	15	_
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	70
. 1		Country Code ³ "Number ⁴ "Kind Code ⁸ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	L
W	h	JP H03-068451	03-25-1991	Toyota Motor Corp.		
TAN	X	JP 61-232217	10-16-1986	Natl Inst for Res		Y
our	1	JP 2000-015097	01-18-2000	Toyota Motor Corp.		V
MA)	7	JP H11-262663	09-28-1999	Toyota Motor Corp.		I ✓
LIA P		WO 2004/004899	01-15-2004	Daihatsu Motor Co., Ltd.		\bigvee
MAG	T	JP H05-509033	02-06-1992	Specialites et Tech	•	<u>L</u>

-							
Examiner Signature	1 2 2 6 7 7 7 1	Julen	į.	Date Considered	3/4	1/06	

*EXAMINER: Initial if reference considered, whether or not obtation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 993-04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Nind of document by the appropriate symbols as Indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/088 (07-05)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE of 01 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

	der inter apertion received	,,,,,,,,			Complete if Known
Substitu	te for form 1449/PTO			Application Number	10/520,824
INF	ORMATION	DIS	CLOSURE	Filing Date	January 7, 2005
STATEMENT BY APPLICANT				First Named Inventor	Hirohisa TANAKA
				Art Unit	1754
	(Use as many she	ets as r	ecessary)	Examiner Name	Cam N. NGUYEN
Sheet	5	of	5	Attorney Docket Number	71465.0008

Examiner	Cite	NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	T ²
Initials*	No.¹	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	τ-
CMN		HIROHISA TANAKA et al., An Intelligent Catalyst, Society of Automotive Engineers, 01-2001-1301	
Car		NOLVEN GUILHAUME et al., Three-Way Catalytic Activity and Oxygen Storage Capacity of Perovskite 1997, page 197-204, volume 165, article number CA971481	
cu)		NOBUHIKO KAJITA et al., Regeneration of Precious Metals in Various Designed Intelligent Perovskite Catalysts, Society of Automotive Engineers, 2002-01-0735	
an		HIROHISA TANAKA et al., Regeneration of Palladium, Topics in Catalysis, Volumes 16/17, Nos. 1-4, 2001	
ON		T. MOTOHIRO et al., Time-resolved Time-of-flight Mass Spectrometry (I), Applied Surface Science 121/122 (1997) 319-322	
Chr	1	T. MOTOHIRO et al., Time-resolved Time-of-flight Mass Spectrometry (II), Applied Surface Science 121/122 (1997) 323-326	
		·	

Examiner	Can Alcius	Date	5/4/06
Signature	Can Nguyen	Considered	0/1100

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Abexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.